



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/602,638

06/25/2003

Dong-seog Han

1349.1217

1052

21171

7590

04/01/2008

STAAS & HALSEY LLP

SUITE 700

1201 NEW YORK AVENUE, N.W.

WASHINGTON, DC 20005

EXAMINER

JOSEPH, JAISON

ART UNIT

PAPER NUMBER

2611

MAIL DATE

DELIVERY MODE

04/01/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

DETAILED ACTION

Applicant's arguments filed on 03/05/2008 have been fully considered but they are not persuasive.

Regarding claim 1, Applicant argue, “the Office Action notes that Fimoff teaches applying a predetermined 'threshold value, without discussing the recited feature of claim 1 of applying an adaptive threshold value or a 'fixed threshold value to the cumulated correlation values.”. However Examiner respectfully disagrees. Fimoff teach that a decision unit deciding the channel estimation values by applying a predetermined threshold value to the cumulated correlation values (see figure 4 and Fimoff further teaches “The correlation channel estimator 40 includes **a cross-correlator 42 that cross-correlates the received signal with the training sequence** [field synchronizing signal] stored in a memory 44 and **a level thresholder 46** [estimation decision unit] that **sets to zero any correlation coefficients that are below a predetermined threshold** [setting output value to zero based on the predetermined threshold is equivalent to deciding the channel estimation values by applying an adaptive threshold value or a fixed threshold value to the cumulated correlation values]. Accordingly, the correlation channel estimator 40 produces a channel estimate h. Fimoff, 6:39-6:48 and Figure 4.” column 6, lines 39 – 47). Thus Fimoff does teach the limitation “an estimation decision unit deciding the channel estimation values by applying an adaptive threshold value or a fixed threshold value to the cumulated correlation values”. Therefore it would have been obvious to an ordinary skilled in the art at the time the invention was made to incorporate the teaching of Fimoff in AAPA in view of Omura to detect the received

signal more accurately. Thus AAPA in view of Omura and Fimoff does teach all cited limitations. Therefore Examiner maintains the rejection of claim 1.

Regarding claim 2 and 5, for the same reasons as stated above, the combination of AAPA in view of Omura and further in view of Fimoff teach all cited limitations. Therefore Examiner maintains the rejection of claims 2 and 5. Applicant is reminded that Examiner is entitled to give broadest reasonable interpretation to the language of the claims.

Regarding claim 8, 9 and 12, for the same reasons as stated above, the combination of AAPA in view of Omura and further in view of Fimoff teach all cited limitations. Therefore Examiner maintains the rejection of claims 8, 9 and 12. Applicant is reminded that Examiner is entitled to give broadest reasonable interpretation to the language of the claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAISON JOSEPH whose telephone number is (571)272-6041. The examiner can normally be reached on M-F 9:30 - 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh Fan can be reached on (571) 272-3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2611

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jaison Joseph/
Examiner, Art Unit 2611

/CHIEH M FAN/
Supervisory Patent Examiner, Art Unit 2611